

Three Phase PV String Inverter

30 kW



The Afore BNT Series Three-phase string inverters are designed for commercial and power plant PV system applications, rating from 30kW. All models with aluminum housing which is anodized, increasing durability and effectively prevents corrosion. Equipped with external inductors, ensure efficient heat dissipation, which significantly improves the reliability and extends the life of the inverters.

The inverter menu is activated by sensor touch buttons. Communication implements are via the Wi-Fi module (which can be changed to Ethernet / GPRS). Check the system status anytime and anywhere via online portal or APP.

Max. 20A MAX. 20Adc String Current Up To 20A	Max. 1.5 PV OVERSIZE Max. 1.5 Time PV Oversize Input	PROTECTION Multiple Intelligent Protections	ANTI-FLOW Anti-Feed-in Function	Wi-Fi Wi-Fi Standard, Ethernet/GPRS Optional	CONFIGURATION Quick & Easy Config. via Wi-Fi	MODBUS MODBUS Communication Ready
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MPPT efficiency > 99.9%	IP 68 Cooling Fan
Intelligent Temperature Control System	Type II DC & AC lightning protection
Active and reactive power compensation, adjust power factor	AC output 1.1x continuous operation

Technical Data

BNT030KTL

PV Input Data	
Max. DC Power (W)	45000
Max. DC Voltage (V)	1100
MPPT Voltage Range (V)	200 -1000
MPPT Full Power Voltage Range (V)	500 - 850
Rated Input Voltage (V)	620
Start-up Voltage (V)	200
Max. Input Current (A)	38 x 2
Max. Short Current (A)	48 x 2
No. of MPP Tracker / No. of PV String	2/5
Input Connector Type	MC4
AC Output Data	
Max. Output Power (VA)	30000
Nominal Output Power (W)	30000
Max. Output Current (A)	48
Nominal Output Voltage (V)	3P+N+PE /3P+PE 230/400
Grid Voltage Range	260Vac-519Vac (according to local standard)
Nominal Output Frequency (Hz)	50/60
Grid Frequency Range	45-55Hz/55-65Hz (according to local standard)
Output Power Factor	1 default (adjustable from 0.8 leading to 0.8 lagging)
Output Current THD	<3%
Efficiency	
Max. Efficiency	98.50%
Euro Efficiency	98.10%
Protection	
PV Reverse Polarity Protection	YES
PV Insulation Resistance Detection	YES
AC Short Circuit Protection	YES
AC Over Current Protection	YES
AC Over Voltage Protection	YES
Anti-Islanding Protection	YES
Residual Current Detection	YES
Over Temperature Protection	YES
Integrated DC switch	YES
Surge Protection	Integrated (Type II)
Smart IV Curve Scanning	YES
Quick Arc Fault Circuit Interruption	Optional
General Data	
Dimensions (W x H x D, mm)	450 x 485 x 210
Weight (kg)	26
Protection Degree	IP66
Enclosure Material	Aluminum
Ambient Temperature Range (°C)	-25 to 60
Humidity Range	0 -100%
Topology	Transformerless
Communication Interface	RS485 / WiFi / Wire Ethernet / GPRS (optional)
Cooling Concept	Intelligent Fan Cooling
Noise Emission (db)	<51
Night Power Consumption (W)	<1
Max. Operation Altitude (m)	≤4000
Certifications and Standards	
EMC Standard	EN/IEC 61000-6-2, EN/IEC 61000-6-3, EN61000-3-11, EN61000-3-12
Safety Standard	IEC 60068, UL1741, EN62109
Grid-connection	IEEE1547, CSA C22, EN50549, VDE4105, VDE0126, RD1699, ABNT NBR16149 & 16150, AS4777.2, NB/T32004, G99, IEC61727